

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014320**Date Inspected:** 24-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

This QA Inspector Randomly observed the following work in progress:

BAY-1

Flux Cored Arc Welding(FCAW) welding of weld joint 20TR2-020-011. Welder is identified as 215397. ZPMC Quality Control (QC) is identified as Mr. Ai Wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-F.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005593.

**Magnetic Particle Testing (MT)**

This QA Inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Counter Weight-CW001-080 weld Components. Total number of welds MT Tested: 02 No's. The weld

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

designations are review as follows:

1. CW001-080-128,133.

BAY-2

Submerged Arc Welding (SAW) welding of weld joint FB3189-001-004. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2221-B-U3c-S-2.

FCAW welding of weld joint FB3193-001-036. Welder is identified as 045203. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-B- U3a-F-1.

BAY-5

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005593.

Visual Testing (VT)

This QA Inspector performed VT of the area previously tested and accepted by ZPMC QC Personnel. The member is identified as OBG TR weld Components. Total number of TR's VT 'd: 09 No's. The TR designations are review as follows:

1. 11TR6-001.
2. 10TR3-008.
3. 11TR7-002.
4. 10TR1-021.
5. 11TR5-003.
6. 11TR1-024.
7. 11TR1-030.
8. 10TR3-035.
9. 10TR3-017.

BAY-6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005590.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The member is identified as WJF-0 weld

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

Components. Total number of welds UT Tested: 08 No's. The weld designations are review as follows:

1. WJF-0-170,172,174,176,178,180,182,184.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005590.

### Magnetic Particle Testing (MT)

This QA Inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG WJF-0 weld Components. Total number of welds MT Tested: 52 No's. The weld designations are review as follows:

1. WJF-0-170,172,174,176,178,180,182,184,171,175,179,183.
2. WJF-0-607~612.
3. WJF-0-615,616,625,626,635,636,645,646.
4. WJF-0-613,614.
5. WJF-0-617~624,627~630.
6. WJF-0-631~634,637~644.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

---